

KLIMENOK, B.V.; KONDRAT'YEV, A.A.; Prinimali uchastiye: BASYROVA, Z.V.;
YELEPINA, V.I.; ZEMLYANSKIY, A.T.; PIKIS, L.N.; STARTSEVA, T.K.;
YANTSEN, Ya.Ya.

Counter-current horizontal extractor for processing hard materials.
Izv. vys. ucheb. zav.; neft' i gaz 4 no.2:75-77 '61. (MIRA 15:5)

(Paraffins) (Diesel fuels)

S/081/63/000/004/034/051
B194/B180

AUTHORS: Basyrova, Z. V., Zemlyanskiy, A. T., Klimenok, B. V.

TITLE: The deparaffination of narrow fractions of diesel fuel with an aqueous solution of carbamide

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1963, 521, abstract 4P160 (Novosti neft. i gaz. tekhn. Neftepererabotka i neftekhimiya", no. 7, 1962, 19-21)

TEXT: Results are given for the deparaffination and blending of narrow 30° fractions of paraffinous diesel fuel (distillation range 195-370°) of Tuymazinsk (crude) in a continuous carbamide deparaffination plant (carbamide concentration in the aqueous suspension is 74 wt%). On the basis of the results a process is suggested for the production of winter-grade diesel fuel with pour point -45°, in which the diesel fraction taken from the rectifying column in accordance on AVT is divided into two fractions, 195-290° and 290-370°. The latter, which comprises 47 vol% of the total diesel fraction, is hydraulically refined and undergoes deep deparaffination with an aqueous solution of carbamide. After this the deparaffinized 290-370° fraction is mixed with the 195-290° fraction which has
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The deparaffination of narrow...

S/081/63/000/004/034/051
B194/B180

not been deparaffinized. [Abstracter's note: Complete translation.]

Card 2/2

L 17945-65 EWT(m)/EPF(c)/ENP(j)/I Pc-4/Pr-4 RM
ACCESSION NR: AP5002561 S/0079/64/034/007/2226/2228

AUTHOR: Petrov, K. A.; Basyuk, A. A.; Yevdakov, V. P.; Mizrakh, L. I.

TITLE: Thiophosphinites

SOURCE: Zhurnal obshchey khimii, v. 34, no. 7, 1964, 2226-2228

TOPIC TAGS: organic phosphorus compound, organic synthetic process, ester, esterification

Abstract: Alkyl- and arylthiophosphinites were synthesized by the reaction of monoalkyl esters of methyl- and phenylphosphinous acid with phosphorus pentasulfide, in yields of 36-40% of the corresponding thiophosphinite, with an admixture of dithiophosphonates. The thiophosphinites were found to be highly reactive. Reaction of the n-butyl and n-propyl esters of methylthiophosphinous acid with tetraethylmethylenediamine produced previously unknown O-n-butyl- and O-n-propylmethyldiethylaminomethylthiophosphinates. Sulfuryl chloride converted O-n-propylmethylthiophosphinite to the acid chloride of the n-propyl ester of methylthiophosphinic acid. The ability of thiophosphinites to enter into a transesterification reaction was demonstrated for the first time; transesterification of the ethyl ester of phenylthiophos-

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L 17945-65

ACCESSION NR: AP5002561

phinous acid with n-hexanol produced the n-hexyl ester of phenylthiophos-
phinous acid. Orig. art. has 3 formulas.

ASSOCIATION: none

SUBMITTED: 15Jun63

ENCL: 00

SUB CODE: OC GC

NO REF SOV: 002

OTHER: 001

JPRS

Card 2/2

BASYUK, A.Ye.; SHOR, G.P.

Some characteristics of closed abdominal trauma in children.
Sov. med. 27 no.10:49-52 O '63. (MIRA 17:6)

1. Iz Kostopol'skoy rayonnoy bol'nitsy (glavnyy vrach S.Ya. Gornakh)
Rovenskoj oblasti.

BASYUK, M.P.

Manufacture of pureed fruit. Khar.prom. no.4:26-28 O-D '62.
(MIRA 16:1)

1. Ukrdiproprod.

(Ukraine—Fruit, Canned)

BASYUK, S.T.; KULESHOV, M.Ya.

Equipment for the investigation and control of extrusion processes.
Kuz.-shtam.proizv. 4 no.8:13-15 Ag '62. (MIRA 15:8)
(Extrusion (Metals)—Testing)

BASYUK, S.T.

Universal die for determining conditions for stretch forming.
Kor.-shtam.preizv. 5 no.5:21 My '63. (MIRA 16:9)

L 20081-65 EPR/EWP(k)/ENT(m)/EWP(b)/EWA(d)/EWP(t) Pf-L/PS-L/ LJP(c)/
JD/HW

ACCESSION NR: AP4049119

S/0182/64/000/011/0019/0023

AUTHOR: Solov'yev, V. P.; Basyuk, S. T.; Kuleshov, M. Ya.

TITLE: Manufacture of seamless, thin-walled pipes and casings

SOURCE: Kuznechno-shtampovoye proizvodstvo, no. 11, 1964, 19-23

TOPIC TAGS: pipe rolling, cold milling, seamless pipe manufacture, seamless casings manufacture, rolling mill design, aluminum rolling

ABSTRACT: Cold milling of seamless pipes and casings with specially-prepared roller bearings instead of ordinary rollers decreases the area more efficiently and permits direct rolling, rather than reflex or back-and-forth rolling. This method is distinguished by the speed of rotation of the pieces, which is a function of the size of the pipe, its relation to the size of the roller bearings, and the rate of spin of the pipe; the rate of the feed, which is also a function of the rate of spin and size relationships; the size reduction of the pipewalls, which for aluminum is such that the tangential angle of the leading roller edge should be no more than 20-22°; and the pressure of the metal piece on the roller bearing, which is a function of the projected area of surface contact. Analysis of the rotation of the pieces shows that a rotation speed $\geq 100\text{m/min}$ produces slippage which adversely affects the internal surface of the pipe, increases friction loss, and has no effect on the rate of feed.

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L 20081-65

ACCESSION NR: AP4049119

The axial, radial, and tangential components of pressure were determined as functions of the size reduction of the walls and the feed (see Figs. 1, 2, and 3 of the Enclosure). Orig. art. has: 4 graphs, 6 drawings, and 14 equations.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 03

SUB CODE: MM, IE

NO REF SOV: 000

OTHER: 000

Card 2/5

L 20081-65

ACCESSION NR: AP4049119

ENCLOSURE: 01



Fig. 1. Axial component of pressure of the metal on the roller bearing as a function of wall reduction and rate of feed (pressure in kg, all others in mm).

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L 20.81-65

ACCESSION NR: AP4049119

ENCLOSURE: 02

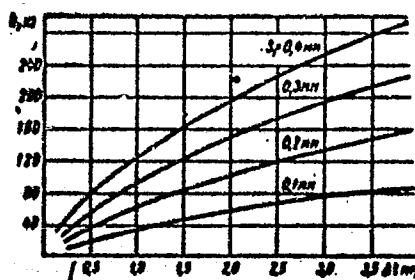


Fig. 2. Tangential component of pressure of the metal on the roller bearing as a function of wall reduction and rate of feed.

Card 4/5

L 20081-65

ACCESSION NR: AP4049119

ENCLOSURE: 03

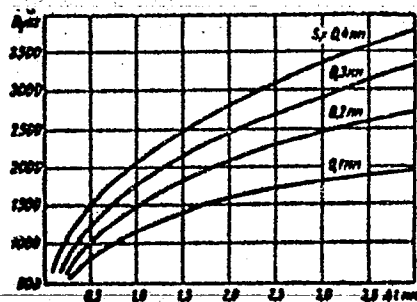


Fig. 3. Radial component of pressure of the metal on the roller bearing as a function of wall reduction and rate of feed.

Card 5/5

BASIUK, T. L.

BASIUK, T. L.

Organizatsiia sotsialisticheskogo sel'skokhoziaistvennogo proizvodstva.

Izd. 3., perer. i dop. Moskva, Sel'khozgiz, 1947. 767 p.

"Spisok ispol'zovannoi literatury": p. 761-

DLC: S241.B36 1947

DA

SO: LC, Soviet Geography, Part I, 1951, Uncl.

PASUK, T.L.

Organizatsiia sovkhoznogo proizvodstva (Organization of state farm production). Moskva, Sel'khozlit, 1952. 375 p.

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

BASYUK, T.

Farm Mechanization

Machinery system in agriculture. Sots. sel'khoz., no. 2 1952.

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

BASYUK, T. L.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Basyuk, T. L.	"Organisation of Sovkhoz Production"	Moscow Economics Institute

SO: W-30604, 7 July 1954

BASYUK, T L

N/5
723.11

MTS - reshayushchaya sila v razvitii kolkhoznogo proizvodstva .B3
(Machine-Tractor Stations are the Deciding Factor in the
Development of Collective Farm Production) Moskva, Gospolitizdat,
1954.

229p. tables.

Bibliographical footnotes.

BASYUK, Timofey Leont'yevich, doktor ekonomicheskikh nauk, professor;
ANDRONOV, I.I., redaktor; ISLENT'Yeva, P.G., tekhnicheskii redaktor

[Principal methods of increasing labor productivity in socialist
agriculture] Osnovnye puti povysheniia proizvoditel'nosti truda
v sotsialisticheskoi sel'skoi khoziaistvo. Moskva, Izd-vo "Znanie,"
1956. 47 p. (Vsesoiuznoe obshchestvo po rasprostraneniui politicheskikh
i nauchnykh znani. Ser. 8, Ekonomika sel'skoi khoziaistva, vyp.2,
no.1) (MLRA 9:11)

(Agriculture) (Labor productivity)

~~BASYUK, Timofey Ieont'evich~~; POLYAKOVA, N., redaktor; DANILINA, A.,
tekhnicheskii redaktor

[Organization of socialist agricultural production; a textbook]
Organizatsiia sotsialisticheskogo sel'skokhoziaistvennogo proizvodstva;
uchebnik, Moskva, Gos. izd-vo polit. lit-ry, 1956. 455 p; (MIRA 10:1)
(Agriculture)

BASYUK, Timofey Leont'evich, doktor ekonom.nauk; ASTAKHOV, V., red.;
CHEPELEVA, O., tekhn.red.

[Differential rent in socialist agriculture] Differentsial'naya
renta v sotsialisticheskoy sel'skoy khoziaistve. Moskva, Izd-vo
sotsial'no-kon.lit-ry, 1959. 56 p. (MIRA 13:5)
(Agriculture--Economic aspects)

BASYUK, Timofey Leont'yevich; RYBAKOVA, V.D., red.; GERASIMOVA, Ye.S.,
tekhn. red.

[Organization of socialist agricultural production] Organizatsiia
sotsialisticheskogo sel'skokhoziaistvennogo proizvodstva. Moskva,
Ekonomizdat, 1962. 483 p. (MIRA 15:7)
(Farm management)

AKOPOV, R.Ya., kand. ekon. nauk, dots.; BASYUK, T.L., doktor ekon. nauk, prof.; BIRMAN, A.M., doktor ekon. nauk, prof.; GRIGOR'YEV, A.Ye., doktor ekon. nauk, prof.; DOKUKIN, V.I., prof.; IKONNIKOV, V.V., prof.; KONDRASHEV, D.D., doktor ekon. nauk; KURSKIY, A.D., doktor ekon. nauk; LOKSHIN, E.Yu., doktor ekon. nauk, prof.; MALYY, I.G., kand. ekon. nauk, dots.; PERVUSHIN, S.P., kand. ekon. nauk; PLOTNIKOV, K.N., TYAPKIN, N.K., kand. ekon. nauk; FILIMONOV, N.P., kand. ekon. nauk; SHAFIYEV, K.N., doktor ekon. nauk, prof.; BAKOVETSKIY, O., red.; KOKOSHKINA, I., mladshiy red.; MOSKVINA, R., tekhn. red.

[Economics; communist means of production] Politicheskaya ekonomiya; kommunisticheskiy sposob proizvodstva. Uchebnik 2., perer. i dop. izd. Moskva, Sotsekgiz, 1963. 599 p.

(MIRA 16:5)

1. Chlen-korrespondent Akademii nauk SSSR (for Plotnikov).
(Economics) (Communism)

BASYUK, T.L., doktor ekon. nauk, prof., red.; OBOLENSKIY, K.P.,
dok r ekon. nauk, prof., red.; FANIN, N.S., red.

[Using mathematical methods for economic studies in
agriculture] Primenenie matematicheskikh metodov v eko-
nomicheskikh issledovaniakh po sel'skomu khoziaistvu.
Moskva, Ekonomika, 1964. 354 p. (MIRA 17:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
ekonomiki sel'skogo khozyaystva.

BASYUK, Timofey Leont'yevich; KOSTIN, V.P., red.

[Organisation of socialist agricultural production]
Organizatsiia sotsialisticheskogo sel'skokhoziaistven-
nogo proizvodstva. Moskva, Ekonomika, 1965. 531 p.
(MIRA 18:7)

ZHUKOV, A.V., kand. tekhn. nauk, red.; BASYUK, V.N., red.; YEREMINA,
I.A., tekhn. red.

[Structural and facing ceramics] Konstruktivnaia i oblitso-
vochnaia keramika. Pod red. A.V.Zhukova. Kiev, Gosstroiz-
dat USSR, 1963. 74 p. (MIRA 17:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut
stroitel'nykh materialov i izdeliy.

SEMENOV, Vladimir Konstantinovich; YEFREMOV, Yuriy Mikhaylovich;
KERNERMAN, Yakov Srulevich; TINYANYI, Viktor Grigor'evich;
BASYUK, V.N., red.

[Improving the design of cranes] Usovershenstvovanie kon-
struktsii kranov. Kiev, Budivel'nyk, 1965. 80 p.
(MIRA 18:9)

Basyukhina, L.V.

SMIRNOVA, L.A.; BASYUKHINA, L.V.

Susceptibility of Brand's vole to experimental tularemia. Izv. Irk.
gos.protivochum.inst. 9:50-52 '51. (MIRA 10:12)
(TULAREMIA)

BASYUKOV, I. Ye.

Engr.

"Experience of the Work of the Bureau for Coordination of Improvements and Inventions of MinMashstroy," Byul. stroi. tekhn., No.5, pp 19-20, 1953

Bureau for Coordination of Improvements and Inventions.

States that, for the guidance of inventors and improvers, a collection of subjects (Sbornik tem) was published in 1952 by the Bureau. The publication covers Construction questions. It differs from publications of previous years in that the subjects are treated in detail, with an indication of the basic requirements. States that MinMashstroy gives material containing descriptions of individual improvement suggestions to the Central Institute of Information on Construction, for publication in series RI brochures.

258T46

BASYUL, N.K.

BISKER, I.M., MOTORNYY, I.A., KRASIL'SHCHIKOV, A.M., BASYUL, N.K.

Effect of low temperatures on the quality of concentrated emulsions of DDT and benzene hexachloride. I.M. Bisker and others. Med. paraz. i paraz. bol. 27 no.2:228 Mr-Apr '58 (MIRA 11:5)

1. Iz Respublikanskoy protivomalyariynoy stantsii Moldavskoy SSR (glavnyy vrach I.M. Bisker)
(INSECTICIDES)

BASYUTOCHKIN, V.M.

EXCERPTA MEDICA Sec.2 Vol.10/3 Physiology March 57

1158. BASYUTOCHKIN V.M., DROBINTSEVA A.V., BOROBIKOVA O.N.,
LEBEDEVA Z.N. and GORYACHEVA O.A. Leningrad. *Biochemistry
of experimental gastritis in the light of cortico-visceral
connections (Russian text) FIZIOL. Z. 1956, 42/2 (192-202) Tables 6.
In experimental gastritis produced in cats by ingestion of 5% acetic acid, the oxidation rate as determined with Tunberg's and Vernon's methods, the thiamine concentration and the phosphatase activity are diminished in the gastric mucosa. These changes are more pronounced in the acute (animals sacrificed after 24 hr.) than in the subacute phase (4-5 days). In the intestinal mucosa and in the liver tissue, which are not directly exposed to the action of acetic acid, the rate of oxidation is increased. Atropine and 'sympathicolysin' counteract the clinical-pathological symptoms as well as the development of the associated biochemical changes. It is suggested that the CNS is involved in the development of gastritis through stimulation of interoceptors, mediated by the autonomous nervous system, and that parasympathetic or sympathetic block decreases the inflammatory reactions.
Simonson - Minneapolis, Minn.

SIENNICKI, W.; PRZYLECKI, St.; BASZ, I.; CYGANKIEWICZ, M.; RADZISZEWSKA, D.
(Wroclaw)

Occurrence of brucellosis in the veterinary and zootechnical personnel
in Wroclaw Voivodeship. Roczn. nauk roln. wet 70 no.1/4:204-206 '60.
(EEAI 10:9)

(Brucellosis)

SIENNICKI, W.; PRZYLECKI, St.; BASZ, I.; CYGANKIEWICZ, M.; RADZISZEWSKA, D.
(Wroclaw)

Brucellosis among the personnel of state farms in Wroclaw Voivodeship.
Rocz nauk roln wet 70 no.1/4:206-208 '60. (KEAI 10:9)

(Brucellosis)

SIENNICKI, W.; PRZYLECKI, St.; BASZ, I.; CYGANKIEWICZ, M.; PIORO, J.
RADZISZEWSKA, D. (Wroclaw)

Brucellosis among the workers of the dairies and meat processing
plants of Wroclaw Voivodeship. Roczn. nauk roln. wet 70 no.1/4:
208-209 '60. (KEAI 10:9)

(Brucellosis)

GARSTKA, Jerzy; BASZYNSKA, Dorota

Halotan anaesthesia in orthopedic surgery. Chir. narzad. ruchu
ortop. Pol. 28 no.7:1025-1028 '63

1. Z Kliniki Ortopedycznej Akademii Medycznej w Poznaniu (Kierownik: prof. dr. W. Dega).

SOBANSKI, Janusz, prof. dr. med.; SZOSLANDOWA, Wanda; DOŁALOWA, Barbara;
BASZCZYNSKA-ZIELINSKA, Barbara

The causes of "primary" and "secondary" glaucoma. Klin. oczna
35 no.2:179-181 '65.

1. Z Kliniki Chorob Oczu Akademii Medycznej w Łodzi (Kierownik:
prof. dr. med. J. Sobanski).

BASZCZYNSKI, Jan; MAJCHERSKI, Tadeusz

Interstitial myocarditis in a 14-month-old child. *Pediat. pol.* 37
no.9:965-970 S '62.

1. Z II Kliniki Chorob Dzieci AM w Lodzi Kierownik: prof. dr med.
F. Redlich.

(MYOCARDITIS)

BASZCZYNSKI, J.; BODALSKI, J.; HORSKI, S.; JAROSIK, N.; KWIATKOWSKA, M.;
MACIEJEWSKI, A.; REDLICH, J.

Morgagni-Adams-Stokes syndrome in a 10-year-old boy; clinical death and resuscitation by prolonged direct heart massage. Kardiolog. pol. 6 no.4:259-265 '63.

1. Z II Kliniki Pediatricznej AM w Lodzi (kierownik: prof. dr. F.Redlich); z Kliniki Chirurgii Dziecięcej AM w Lodzi (kierownik: prof.dr. A.Maciejewski) i z Kliniki Neurologicznej AM w Lodzi (kierownik: prof. dr. E.Herman).

*

BASZCZYNSKI, J.; DEBIEC, B.; NOWICKI, St.

Acute forms of endocardial fibroelastosis in an infant.
Kardiol. pol. 6 no.4:281-284 '63.

1. Z II Kliniki Pediatrycznej AM i WAM w Lodzi; kierownik:
prof.dr. F.Redlich.

*

BASZCZYNSKI, J.; MAJCHERSKI, T. ZAWADZKI, R.

A primary tumor of the heart in an infant, hamartia myo-
elasto-fibroidea. Kardiol. pol. 6 no. 4: 285-289 '63.

1. Z II Kliniki Pediatricznej AM w Lodzi; kierownik: prof.
dr. F. Redlich.

*

BASZCZYNSKI, Jan; MAJCHERSKI, Tadeusz; NOWICKI, Stanislaw

A case of hypersensitivity to vitamin D. *Pediat. pol.* 38 no.1:
63-69 '63.

1. Z II Kliniki Pediatricznej AM w Lodzi Kierownik: prof. dr
med. F. Redlich.

(VITAMIN D2) (RICKETS) (BRONCHITIS)
(HYPERCALCEMIA) (DRUG ALLERGY)

BASZCZYNSKI, Jan; MAJCHERSKI, Tadeusz; NOWICKI, Stanislaw;
~~ZAWADZKI~~, Ryszard

Contribution to Ivemark's syndrome. Pediat. pol. 38 no.10:
927-931 0 '63.

1. Z II Kliniki Pediatrycznej AM i WAM w Lodzi Kierownik: prof.
dr med. Fr. Redlich i z Pracowni Anatomopatologicznej PSK nr 4
Kierownik: lek. R. Zawadzki.

(SITUS INVERSUS) (HEART DEFECTS, CONGENITAL)
(SPLEEN) (ABNORMALITIES)

~~MAJCHERSKI, Tadeusz; NOWICKI, Stanislaw~~

Analysis of heart diseases among infants treated in the 2d
Pediatric Clinic of the Academy of Medicine in Lodz. Pediat.
pol. 38 no.11:973-978 N '63.

1. Z II Kliniki Pediatrycznej AM i WAM w Lodzi Kierownik:
prof. dr med. F. Redlich.

(HEART DEFECTS, CONGENITAL)

(HEART DISEASES)

(HEART SEPTAL DEFECTS, VENTRICULAR)

(AORTIC COARCTATION) (SITUS INVERSUS)

(TETRALOGY OF FALLOT)

WISNIEWSKI, J.; KUMARASWAMY, S.; KUMAR, S.; KUMAR, S.

Myocardial infarction in a 2-month-old infant with primary
Pulmonary hypertension. Kardiologia Polska. 7 no.1:63-68 '64.

1. Z II Kliniki Pediatricznej Akademii Medycznej (Kierownik:
prof. dr. E. Redlich) i z Pracowni Anatomopatologicznej Państw.
Szpitala Klinicznego Nr. 4 w Łodzi (Kierownik: dr. H. Sawadzki).

BASZCZYNSKI, Jan; DEBIEC, Barbara; SUMINSKA, Henryka

Duodenal perforations in children during therapy with adrenal cortex hormones. *Pediat. Pol.* 40 no.6:623-626 Je '65.

1. Z II Kliniki Pediatricznej AM w Lodzi (Kierownik: prof. dr. med. F. Redlich [deceased]) i z Kliniki Chirurgii Dziecięcej AM w Lodzi (Kierownik: prof. dr. med. A. Maciejewski).

DEBIEC, Barbara; BASZCZYNSKI, Jan; BIELINSKA, Wanda; CHYLINSKA, Hanna

Bacterial endocarditis in children in the era of antibiotics.
Pediat. Pol. 40 no.8:809-814 Ag '65.

1. Z II Kliniki Chorob Dzieci AM i Wojskowej AM w Lodzi
(Kierownik: prof. dr. med. F. Redlich [deceased]).

S/081/62/000/019/031/053
B101/B180

5.3630

AUTHORS: Boryniec, Alenazy, Baszkiewicz, Bogumił

TITLE: Synthesis and properties of organophosphorus copolymers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1962, 510, abstract
19P52 (Roczn. chem., v. 36, no. 2, 1962, 365-366 [Pol.;
summary in Eng.])

TEXT: Bulk polymerization was used to produce copolymers of phenyl
dichloro phosphine with vinyl acetate, methyl methacrylate, and styrene
(at different ratios of components). The copolymer of phenyl dichloro
phosphine with vinyl acetate was saponified. The properties of the
resulting products were studied. [Abstracter's note: Complete translation.]

✓B

Card 1/1

BASZKIN, Adam, mgr. ins.

Serigraphy. Poligrafika 14 no.3:3-4 Mr '62

1. Centralne Laboratorium Poligraficzne, Warszawa

TKACZEWSKI, Wladyslaw; BASZKO, Alfons ; PELKA, Wlodzimierz

Rhythm and conduction disorders in acute myocardial infarction
treated with hyaluronidase. Wiad. lek. 18 no.4:341-344 15 F'65

1. Z III Kliniki Chorob Wewnetrznych Wojskowej Akademii Medycznej
w Lodzi (Kierownik: prof. dr. med. A. Himmel).

BASZOV, N.G.

Semiconductor quantum generators. Technika 8 no.12:2
D '64.

1. Corresponding Member of the Academy of Sciences of the
U.S.S.R.

BASZYNSKI, Boleslaw, mgr inz.; POSZWINSKI, Kazimierz, mgr;

Certain problems occurring in managing the water resources
of Poland. Gosp wodna 24 no. 1: 4-7 Ja '64.

BASZYNSKI, Boleslaw, mgr inz.; PASZWINSKI, Kazimierz, mgr

Construction of sewage purification stations must be given
highest priority among capital investments. Przegl techn 85
no.2:4 12 Ja '64.

BASZYNSKI, Janusz

Electric conductivity of $\text{Ni Fe}_2 \text{O}_4$ ferrite. Acta physica Pol 21
no.4:351-358 Ap '62.

1. Ferromagnetic Laboratory, Institute of Physics, Polish Academy of
Sciences, Poznan.

BASZYNSKI, Janusz

Ferrimagnetics of composition $\text{MnFe}_{2-x}\text{Cr}_x\text{O}_4$ and $\text{MnFe}_{2-x}\text{Al}_x\text{O}_4$
with $0 \leq x \leq 2$. Acta physica Pol 24 no.3:445-446 S'63

1. Ferromagnetic Laboratory, Institute of Physics , Polish
Academy of Sciences, Poznan.

BASZCZYNSKI, J.; LEWANDOWICZ, J.; NOWICKI, S.; ZAWALZKI, P.

Myocardial infarction in a 2-month-old infant with primary
Pulmonary hypertension. Kardiol. Pol. 7 no.1:63-68 '64.

1. Z II Kliniki Pediatrycznej Akademii Medycznej (Kierownik:
prof. dr. E. Redlich) i z Pracowni Anatomopatologicznej Państw.
Szpitala Klinicznego Nr. 4 w Łodzi (Kierownik: dr. R. Zawadzki).

B. SZYMKI, A.

"Problem of Wells in Rural Settlements", p. 6, (GOSPODARSTWO ROLNE, Vol. 15, No. 1, Jan. 1955, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEML), LC, Vol. 4, No. 5, May 1955, Encl.

BASZYNSKI, S.

BASZYNSKI, S. Production cost of electric power in culture and forestry. p. 512.
Vol. 16, no. 12, Dec. 1956] GOSPODARKA WCDNA. Warszawa, Poland.

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

BASZYNSKI, S.

TECHNOLOGY

PERIODICAL: GOSPODARNA WODNA. Vol. 18, no. 8, Aug. 1958.

BASZYNSKI, S. Cost of hydraulic structures. p. 335.

Monthly List of East European Accessions (LEAI) LC Vol. 8, no. 4.

April 1959, Unclass

BASZYNSKI, S.

TECHNOLOGY

PERIODICAL: GOSPODARKA WODNA. Vol. 18, no. 9, Sept. 1958

BASZYNSKI, S. Development of hydroelectric power in the Soviet Union as compared with the world development. p. 382.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 4.

April 1959, Unclass

BASZYNSKI, T.

"Curves of the Levels of Vitamin A and Carotene in Blood and Milk of Cows of the Red Danish race during the period of a year." p. 339. (Acta Physiologica Polonica, Vol, 4. no. 4, 1953 Warszawa.)

Vol. 3, no. 6

SO: Monthly List of East European Accessions./Library of Congress, June 1954, Uncl.

BASZYNSKI, Tadeusz

Tocopherols and their role in plants. Postepy nauk roln 6 no.6:
39-54 N-D '59. (KEAI 9:7)

1. Katedra Fizjologii Roslin Uniwersytetu Marii Curie-
Skłodowskiej w Lublinie
(Tocopherols) (Plants)

CZECZUGA, B.; BASZYNSKI, T.

Some hydrochemical data of the waters of Lake Rajgrad.
Polskie archiw hydrobiol 11 no. 3: 267-274 '63.

1. Zaklad Biologii, Akademia Medyczna, Bialystok.

2/056/62/019/002/005/014
I037/I242

AUTHORS: Bat', A., and Gladštejn, I.

TITLE: Plastic deformation of steel foil on cold rolling

PERIODICAL: Přehled technické a hospodářské literatury,
Hutnictví a strojírenství, v.19, no.2, 1962,
93, abstract HS 62-1187 (Prom. stroit., v.39,
no.7, 1961, 18-22

TEXT: The immersion evaluation determines the smallest radius of curvature during the cold rolling of sheets for construction of vessels, kettles, etc. Experimental evaluation of the magnitude of plastic deformations, at which the construction steel still preserves the necessary transduction properties. The characteristics of investigated Soviet steel. The minimal bending radius of sheets of low-

Card 1/2

Z/056/62/019/002/005/014
I037/I242

Plastic deformation of steel...

alloyed steel with a low carbon content, destined for statically or dynamically stressed structures at positive or negative temperatures. 1 drawing, 4 diagrams, 2 tables.

✓

[Abstracter's note: Complete translation.]

Card 2/2

BAT', A.A., kand.tekhn.nauk; GLADSHEYN, L.I., inzh.

Plastic deformations during the cold rolling of sheet steel.
Prom. stroi. 39 no.7:18-22 '61. (MIRA 14:7)

1. Institut Proyekestal'konstruktsiya.
(Sheet steel)

1ST AND 2ND LETTER																										3RD AND 4TH LETTER																										5TH AND 6TH LETTER																									
AUTHOR INDEX																										SUBJECT INDEX																										CROSS REFERENCE																									
<p>Bat, A.</p> <p>R</p> <p>Bat, A., Dudnikov, P. P., Orebenik, A., and Endovitskii, V. REFRACTORY FIREBRICK WITH A HIGH ALUMINA CONTENT. Izv. Akad. Nauk SSSR, 1953 (1-2) 80-86. -- Production and properties of firebrick with 40% Al_2O_3 are given. It resists a temperature to 1750°.</p>																																																																													

BAT', A. A.

USSR/Metals

Plastic Deformation
Resilience

Sep 48

"Extent of Deformation," Ya. B. Fridman, A. A. Bat',
All-Union Inst of Aviation Materials, 62 pp

"Zavod Lab" Vol XIV, No 9

Report of experiments on various steels, copper,
aluminum and duralumin. Results showed differences
in magnitude and form of deformed volume in alloys
and medium- and high-tensile steels. True
resilience, σ_{ϵ} true (the ratio $\frac{V_{def}}{V_{orig}}$) reflects
behaviour of material in shock bending tests more
accurately than the usual value σ_{ϵ} . V_{def} is

16/49792

USSR/Metals (Contd)

Sep 48

practically the same for static and dynamic tests.

16/49792

M 607/111

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*A Study of the Plasticity of Thin Metal Sheets. Ya. B. Fridman and A. A. Pat' (Zavod. Lab., 1948, 14, (12), 1462-1469).—[In Russian]. Experiments were carried out to determine the variation of plasticity of smooth and of perforated sheet-metal specimens taken along and across the direction of rolling. The results were as follows: (1) The reduction of area of smooth specimens of Chromanil steel sheet 3 mm. thick taken along the direction of rolling was 1.5 times greater for specimens in the medium-strength state (oil quenched from 880° C. and tempered at 550° C.) than for those in the high-strength state (quenched and tempered at 300° C.). In smooth specimens taken across the direction of rolling, the reduction of area of medium-strength specimens was almost double that of high-strength specimens. In specimens having a central hole 5 mm. in dia. the plasticity of specimens tempered at 550° C. was nearly double that of identical specimens tempered at 300° C. when taken across the rolling direction; in specimens taken along the rolling direction this difference was smaller. (2) Under biaxial stress applied to sheet specimens in the Erichsen test, both the depth of the impression at which cracking first occurred and the corresponding load were smaller for specimens having a hole in the centre than for smooth, intact specimens, the difference being more marked if the perforations had a jagged outline. This was true for all the materials tested (Chromanil steel, Duralumin, aluminium, copper, and AlTi). (3) The true specific elongation was always smaller for biaxial stress than for uniaxial if the uniaxially tested specimens were taken along the direction of rolling; if they were taken in the perpendicular direction the same was nearly always true.—T. O. L.

Jan. 1957

BAT, A.A.

Journal of the Iron and Steel
Institute
Vol. 176 Part 3
Mar. 1954
Properties and Tests

5
③ met

Evaluation of Notch Plasticity on Half-Ring and Prismatic Specimens. Ye. B. Fridman, A. A. Bat' and T. A. Volodina. (*Zondskaya Laboratoriya*, 1950, 16, (8), 968-975). [In Russian]. A simple method for the evaluation of the sensitivity of metals to notching along and across the fibres during single static loading is reported. The method is based on the measurement of the notch plasticity of a notched specimen being bent by a static load, the plasticity being determined from the deflection in the plastic zone when the first crack appears. Deflection is found from the deformation diagram. For studying the transverse mechanical properties of small metal sections half-ring specimens are recommended. The method was tested on steels and some aluminium alloys at room temperature and at -70°C . In all tests the deflection changed more sharply than toughness. The proposed method has the following advantages over the usual evaluation of materials by toughness: (a) Notch plasticity is determined independently of the strength of the material, thus enabling materials of different strength to be compared; (b) the use of half-ring specimens enables transverse notch-plasticity to be conveniently controlled in parts down to 15 mm. in dia.; and (c) the method is more sensitive than the normal determination of deformation on impact specimens. The method is time-consuming.—S. K.

BAT, A A

SUBJECT: USSR/Welding.

135-6-2/13

AUTHOR: Bat', A.A., Engineer.

TITLE: Investigation of Fatigue Resistance in Welded Joints of Steel "HL-2." (Issledovaniye ustalostnoy prechnosti svarnykh soedineniy iz stali "HL-2").

PERIODICAL: "Svarechnoye Proizvodstvo", 1957, # 6, pp 4-7 (USSR)

ABSTRACT: The investigation described had the purpose of determining the effect of structural heterogeneity caused by welding, and of stress concentration caused by the geometric form of the joint. The factor of residual welding stresses has not been considered. (The author remarks that there is a great number of works dedicated to this problem, the results of which are contradictory). Reference is made to data in foreign literature.

The article gives a detailed description of the experimental technology; chemical composition and mechanical properties of steel "HL-2" and "CT.3". The fatigue resistance values obtained are shown in diagrams plotted on logarithmic coordinates.

Card 1/2

The main conclusion is that the geometric stress concentration (i.e. the geometric form of joint) affects the resistance limit

135-6-2/13

TITLE: Investigation of Fatigue Resistance in Welded Joints of Steel
"H/A-2" (Issledovaniye ustalostnoy prechnosti svarnykh
soyedineniy iz stali "H/A-2").

independently of the presence of structural metal heterogeneity. The effect of smooth contour transfer in the points of stress concentration has been known before, but the method of machining the welds to provide such smooth contours was based only on assumptions concerning the degree to which the stress concentration affects the strength of the joint, separately and in combination with heterogeneous structure. The present investigation provides a better grounded basis for technology.

The article contains 2 charts, 1 series of sketches, 5 diagram series, and 7 bibliographic references (4 of which are Russian).

ASSOCIATION: State Projecting Institute "Proyektstal'konstruktsiya".

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 2/2

BAT', A.A.

Causes of increased sensibility of HL-2 steel to stress
concentrations under repeated load. Avtom.svar. 10 no.6:71-73
N-D '57.

(MIRA 11:1)

1.Gosudarstvennyy proyektnyy institut Proyekestal'konstruktsiya.
(Steel alloys--Fatigue)

AUTHOR: BAT' ,A.A., Engineer. PA - 2506
TITLE: Utilization of Low-Alloyed Steel for Weldable Constructions.
(Conference at the Institute for Metallurgy "A.A.Bajkow")
(Ispol'sovanie niskolegirowannoi stali dlia swarnykh konstruktsii,
Soweshchanie v institute metallurgii, Russian)
PERIODICAL: Vestnik Akademii Nauk SSSR, 1957, Vol 27, Nr 2, pp 111 - 112
(U.S.S.R.)
Received: 5 / 1957 Reviewed: 6 / 1957
ABSTRACT: One of the most important tasks for the organization of industry is
the utilization of steel of greater strength and of low alloyed steels
for weldable constructions.

In accordance with the instructions issued by the XX. Congress of the
Communist Party of the U.S.S.R. concerning the sixth five year's
plan the production of this type of steel is to be increased to
seventeen times the quantity produced in 1955. This figure is to
be reached by 1960.

On October 10th and 11th 1956 a conference was held with the parti-
cipation of scientific representatives of Institutes, Universities,
and industry in order to discuss the possibilities of the proper
utilization of low-alloy steel in weldable constructions and co-
ordination of the plans for scientific work to be carried out in
this field. The conference was opened by N.Rykalin, corresponding

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PA - 2506

Utilization of Low-Alloyed Steel for Weldable Constructions.
(Conference at the Institute for Metallurgy "A.A.Bajkow".)

member of the Academy of Science, who stressed the importance of developing scientific research with a view of the industrial utilization of low alloy steel for weldable constructions. G.I. Liwschiza, cand.tech.sc. dealt with some properties of alloyed steels for welded constructions. Also the importance of the production of new electrodes with a high melting coefficient for the welding of alloyed steels was pointed out. Dr.tech.sc. N.P.Schtschapow spoke about the advantages and disadvantages of low alloy steels and their use for weldable constructions. The basic advantages are: great strength, high degree of resistance against atmospheric corrosion, etc. Lack of low alloy steel causes welding seems to become sensitive as well as a concentration of stresses in the case of repeated stress being brought to bear on them. W.M.Kondratowitsch (Ministry for the Construction of transport machines) spoke about the use of low alloy steels for the construction of railroad cars. He believes that the production of nickel-containing steels on the basis of naturally alloyed ores is not enough in order to be able to produce good steels for the construction of railroad cars. G.I.Margolin and G.W.Malachowskij (Ministry for the Shipbuilding Industry) stated that heavy plate steel and

Card 2/3

PA - 2506

Utilization of Low-Alloyed Steel for Weldable Constructions.
(Conference at the Institute for Metallurgy "A.A.Bajkow").

structural iron with a low content of carbon and manganese have a sufficient high plasticity limit, have good technological properties, and welds well. Therefore this steel is destined to be used for building tankers and large vehicles for industrial purposes. Unfortunately, a number of interesting reports were not delivered.

ASSOCIATION: Not given.

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress.

Card 3/3

BAT', A. A.

AUTHOR: Bat', A. A., Engineer.

30-9-43/48

TITLE: On the Welding Stresses and the Durability of Welded
Constructions (Svarochnyye napryazheniya i prochnost'
svarnykh konstruktsiy).

PERIODICAL: Vestnik AN SSSR, 1957, Vol. 27, Nr 9, pp. 130-131 (USSR)

ABSTRACT: The investigation of the influence of welding stresses still
existing in the constructions is of very great practical
importance. It is sufficient to know that numerous
destruction of hulls, bridge cranes, railroad bridges, oil
reservoirs and many an other construction are to be traced
back to the harmful action of residual stresses. The
predominant opinion of engineers and designers coincides
with the research data of the scientists. The consultation
held in the Moscow Institute for Metallurgy on these problems
was very informative. Some scientists took a negative
attitude, as they advocated the opinion that balanced
residual stresses cannot impair the stability of the
constructions, that very much depended on the material used.
N. Rykalin, directed by the AN, outlined the next important
research tasks concerning this problem. Among these are:

Card 1/2

CIA-RDP86-00513R000203920006-9

CIA-RDP86-00513R000203920006-9"

AUTHORS: Bat', A. A., Gladshteyn, L. I. 30-58-3-39/45

TITLE: Questions of the Treatment of Refractory Alloys
(Voprosy obrabotki zharoprochnykh splavov)
A Conference at the Institute for Engineering Sciences
(Soveshchaniye v Institute mashinovedeniya)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Nr 3
pp. 113-115 (USSR)

ABSTRACT: Heat resistive alloys are at present being used in all branches of industry. In order to discuss problems are connected there with a conference was called on December 18th to December 21th 1957, by the Institute for Engineering Sciences and the Commission for Technology of Machine Building of the AS USSR; Work was carried out in plenary sessions and 4 sections (Casting, treatment under pressure, machining and welding). In numerous reports the specific properties of these alloys are investigated and new constructional solutions of machine parts requiring a new working technology were investigated. In the section dealing with castings (under the supervision of L. I. Pantalov, doctor of technical sciences) a report

Card 1/3

Questions of the Treatment of Refractory Alloys
A Conference at the Institute for Engineering Sciences

30-58-3-39/45

was made on vacuum smelting, as well as on the structural refining of cast steel. In the section on working under pressure (under the supervision of A. I. Tselikov, Corresponding Member of the AS USSR) thermomechanic regimes were dealt with, as well as the development of a modern technological equipment for the realization of high specific pressure. In the section on welding (under the supervision of G. A. Nikolayev, Corresponding Member of the AS USSR) reports were delivered, among others on new methods of automatic welding in an atmosphere of carbonic acid gas, as well as on electric slag welding. In the section dealing with machining (under the supervision of A. I. Isayev, doctor of technical sciences) the production of cutting tools of particularly great durability was dealt with, in which case liquid carbonic acid is used as a coolant. Special attention was devoted to the problem of metal saving, because the various alloy elements (nickel, chromium, columbium, titanium, cobalt, molybdenum, tungsten, boron, and others) are rare and expensive. Therefore

Card 2/3

Questions of the Treatment of Refractory Alloys
A Conference at the Institute for Engineering Sciences

30-58-3-39/45

working methods are developed which permit a saving of Waste material (by accurate casting and punching, electric welding in a protective milieu). The following drawbacks were found to exist in the field of treatment of the heat-resistive alloys: Insufficient velocity of the solution of some practical problems, too little exchange of experience, the absence of a scientific coordination center. The following decisions were taken: Improvement of working methods in order to obtain a clean surface; development of new vacuum plants, mechanized furnaces, of steel qualities for punching work, of new electrodes; the working out of measures for the purpose of obtaining faultless welding-seams; the improvement of cutting processes: The congress also stressed the necessity of establishing a research coordination center at the Institute for Engineering Sciences of the AS USSR. At the same time an exhibition of scientific and of technical literature of Soviet and foreign origin dealing with this problem was held.

Card 3/3

AUTHORS: Bat', A.A., and Gladshteyn, L.I. SOV-28-58-4-11/35

TITLE: Criteria for Evaluating Steel Proneness to Mechanical Aging
(Kriterii otsenki sklonnosti stali k mekhanicheskomu sta-
reniyu)

PERIODICAL: Standartizatsiya, 1958, Nr 4, pp 41 - 42 (USSR)

ABSTRACT: The existing methods of determining proneness of steel to aging are not sufficient to explain the different causes of toughness or to recommend a deformation method for determining the proneness of steel to aging. It is necessary to develop a new method, based on a series of experiments with specimens which were investigated at different temperatures, both in their initial conditions and in conditions subsequent to aging. The value of the displacement of the critical interval of brittleness affected by cold hardening and annealing may serve as a quantitative criterion for determining steel proneness to aging. There are 3 graphs.

ASSOCIATION: GPI Proyektstal'konstruktsiya

1. Steel--Mechanical properties

Card 1/1

AUTHORS: Pridantsev, M. V., Doctor of Technical Science, Professor; 133-58-5-22/31
 Bat' A. A. Engineer, Gladshteyn, L. I., Engineer, and
 Levinzon, Kh. Sh.

TITLE: Heat-Treated steel, St. 3kp. brand, for Building Structures
 (Termicheski obrabotannaya stal' marki St. 3kp dlya
 stroitel'nykh konstruksiy)

PERIODICAL: Stal', 1958, Nr 5, pp 449-456 (USSR)

ABSTRACT: About 80% of steel used in the building industry consists of low carbon rimming steel St. 3kp delivered in a hot rolled state with comparatively low mechanical properties. Therefore, some improvement of this steel by a heat treatment on the works is of particular importance. In the paper an investigation of the properties of the steel heat treated under works conditions (Nizhniy Tagil Combine) representative of the normal works' output is described. Steel plates 1500 x 6000 mm, 12, 20 and 40 mm thick from two heats representative of the low and upper limits of carbon content were taken for the investigation (GOST-380-50). The composition in %:

	C	Mn	Si	Cr	Ni	Cu	P	S
Card 1/5	0.14	0.47	traces	.03	.03	0.24	.025	.044
	0.19	0.54	traces	.02	.04	0.25	.017	.033

Heat-Treated Steel, St. 3p brand for Building Structures 133-58-5-22/31

Two modifications of heat treatment were tested: hardening without annealing (heating to 930°C , soaking for 20 to 45 minutes, depending on the plate thickness, cooling in running water for 3 to 6 minutes, depending on the plate thickness, before dipping into water, the temperature of the plates usually fell to 840 to 880°C) and hardening with annealing (at 580 to 600°C for eight hours). Mechanical properties, tendency to mechanical ageing and weldability of the specimens cut from heat treated plates were investigated. Table 1 - mechanical properties of steel specimens cut from edges of plates as hot rolled (GK), hardened (Z) and hardened and annealed (Z + O); Table 2 - chemical composition and mechanical properties of heat treated steel specimens cut out some distance from the plate edges. Fig. 1, the dependence of the impact strength on the test temperature; Fig. 2 - the microstructure of hardened steel. A low tendency of thermally treated carbon rimming steel to ageing is due to its low temperature of brittleness in the initial state. In order to check this view as well as to determine the impact strength at various temperatures before and after ageing depending

Card 2/5

133-58-5-22/31

Heat-Treated Steel, St. 3kp brand, for Building Structures

on the conditions of thermal treatment a number of experiments were carried out with 12 mm thick plates. Specimens 260 to 80 mm were heated to 930°C, soaked at this temperature for 30 minutes and then cooled with four various velocities (Fig.3). The microstructure of steel after all four types of thermal treatment is shown in Fig.4. The ageing action on steel after various thermal treatments was evaluated not only by changes in the impact strength at a few temperatures (+20 to -20°C) but also by the direct value of the shift of the critical temperature interval of brittleness. The dependence of the impact strength on the test temperature for the three cooling velocities A - with furnace, B in air and V in oil with the indication of the nature of fracture are given in Fig.5, and the dependence of the temperature range of brittleness on the mean linear size of grain in Fig.6. In investigations of the weldability of St.3kp steel hardened, in order to decrease its tendency to brittle destruction and to increase its strength, special attention was paid to retaining these properties. The influence of welding on the first property was evaluated from the impact

Card 3/5

Heat-Treated Steel, St. 3kp brand for Building Structures

133-58-5-22/31

strength of the welded zone and on the second property - from tensile tests. The dependence of the impact strength in the zone of welding on the consumption of power per unit of length of welds is shown in Fig.8 and on the test temperature - Fig.10. The results of tests of welded joints welded manually and automatically are given in Table 3. The preparation of edges for welding is shown in Fig.9. Conclusions: Thermal treatment (hardening without annealing) of low carbon steel St.3kp for structural purposes is advantageous as the metal obtains increased strength and lowered tendency to brittle fracture in comparison with the hot rolled steel of the same type. Plates of 12 to 40 mm thick hardened without annealing possess the yield strength not less than 30 kg/mm², the impact strength after mechanical ageing 4 to 6 kg cm² and the threshold of brittleness not above -60°C. The beneficial influence of thermal treatment is a decrease in the size of ferrite grains during hardening. The mechanical properties of welded joints remain near to those of the metal itself.

Card 4/5 Welding can be carried out under the same conditions as

Heat-Treated Steel, St. 3kp brand for Building Structures 133-58-5-22/31

for hot rolled steel. A more complete utilisation of the increased strength of hardened carbon steel would be possible on development of special electrodes and electrode wire. During the production of hardened steel the upper limit of its carbon content should be limited. The steel investigated can be recommended for welded structures. The following participated in the work: from Nizhniy Tagil Combine: Ye. Z. Freydenzon, L. A. Natutskaya, N. A. Chinikova, A. I. Arshinov, A. Ye. Berkser, I. A. Burdina and from TsNIICHm: I. M. Vyshvaynyuk and Yu. I. Lebedev. There are 3 tables, 10 figures and 5 references, all of which are Soviet.

ASSOCIATIONS: TsNIICHm and GPI Proyektstal'konstruktsiya

Card 5/5

AUTHOR: Bat', A.A.

SOV-125-58-8-10/16

TITLE: ~~Some Data on~~ Vibrational Strength of "St. 3 kp" Hardened Steel
(Nekotoryye dannyye o vibratsionnoy prochnosti zakalennoy stali St. 3 kp)

PERIODICAL: Avtomaticheskaya svarka, 1958, Nr 8, pp 63-68 (USSR)

ABSTRACT: During recent years extensive studies of heat-treated rimming open-hearth "st. 3 kp" steel have been conducted in the USSR. Information is presented on an experimental investigation of the vibrational strength of "St.3 kp" steel beams. Information includes detailed descriptions of experiments and photographs of observed fatigue cracks. It was stated that fatigue cracks can occur under repeated compression at comparatively slight stress concentration caused by a small pore. The effect of preliminary repeated compression on the results of subsequently repeated tension could not be determined. Hardened "St 3" steel proved less sensitive to stress concentration than "NL2" steel. The preliminary conclusion, that the higher static strength of structural steel entails higher sensitivity to stress concentrations under repeated loadings, coincides with conclusions made by Professor N.O. Okerblom.

Card 1/2

SOV-125-58-8-10/16

Some Data on Vibrational Strength of "St. 3 kp" Hardened Steel

There is 1 diagram, 2 graphs , 1 table, 3 photos and 4 Soviet references.

ASSOCIATION: GPI "Proyektstal'konstruktsiya"

SUBMITTED: May 7, 1958

1. Steel--Vibration 2. Steel--Test results

Card 2/2

RAT', A.A.; GLADSHTEYN, L.I.

Evaluating the tendency of steel to mechanical aging. Standartizatsiia
22 no.4:41-42 J1-Ag '58. (MIRA 11:10)

1.Gosudarstvennyy proyektnyy institut Proyektstal'konstruktsiya.
(Steel--Testing)

bat' A.
PRIDANTSEV, M.V., prof.; BAT', A.A., inzh.; GLADSHTEYN, L.I., inzh.;
LEVINZON, Kh.Sh., inzh.

The ST.Zkp chilled steel as a new prospective material for steel
structures. Stroil. prom. 36 no.2:38-39 P '58. (MIRA 11:2)

1. Gosudarstvennyy proyektnyy institut Proyektstal'konstruktsiya i
TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
(Steel, Structural)

BAT', A. A. Cand Tech Sci -- (diss) ^{Mode} "Regime of ~~the~~ operation of crane girders
and ^{their} ~~the~~ calculation of ^{on the basis of endurance} ~~their strength~~." Mos, 1959. 18 pp including cover
(Min of Higher and Secondary Specialized Education RSFSR. Mos Order of Labor
Red Banner Construction Engineering Inst im V. V. Kuybyshev), 200 copies
(KL, 52-59, 120)

18(7)

SOV/125-59-5-11/16

AUTHOR: Bat' A.A., Engineer

TITLE: Data on Vibratory Strength of Low Alloyed Steel Type 14G and 19G

PERIODICAL: Avtomaticheskaya svarka, 1959, Vol 12, Nr 5 (74)
pp 91-92 (USSR)

ABSTRACT: The author presents the results of a test which was made to find the characteristic qualities of the Steel 14G and 19G. Welded H-beams of Steel 14G and 19G were tested. The results are given in the schedule. The fatigue limit of H-beams of steel 14G and 19G with ribs welded on their strake was at 20 Kg/mm², that means, that it is considerably higher than in H-beams with stiffening ribs, not welded on the strake. There are 1 graph and 1 table..

ASSOCIATION: Institut "Proyektstal'konstruktsiya" (Institute
"proyektstal'konstruktsiya")

SUBMITTED: February 19, 1959
Card 1/1

BAT', A. A. ; GLADSHTEYN, L. I.

Studying properties and weldability of thick 14X8 steel sheets.
Mat. po stal'. konstr. no.4:153-161 '59. (MIRA 13:8)
(Sheet steel--Welding)

BAT', A.A.; KOSHUTIN, B.N. (Moskva)

Statistical studies of crane loads. Stroi.mekh.i rasch.
soor. 2 no.3:1-5 '60. (MIRA 13:6)
(Strains and stresses) (Cranes, derricks, etc.)

BAT', A.A., insh.

Indicators of the performance of construction elements of
industrial buildings. Prom.stoi. 38 no.1:42-44 '60.
(MIRA 13:5)

(Building, Iron and steel)

10 7400
244200

25236

S/122/60/000/002/003/018
A161/A130

AUTHORS: Bat', A. A., Engineer; Shapiro, G. A., Doctor of Technical Sciences

TITLE: Steel structures endurance calculation

PERIODICAL: Vestnik mashinostroyeniya, no. 2, 1960, 13 - 17

TEXT: Fatigue cracks have been revealed in the course of several years in some elements of steel structures, particularly in welded crane way beams. The authors criticize the standard Soviet calculation method "NITU 121-55" which does not consider varying service conditions of structures, stress the difference between the service of machine parts and structural elements, the detrimental effect of arc welding and riveting used for structures, etc. In their opinion the fundamental calculation rule must be to let the maximum stresses in the calculated element not exceed the rated fatigue resistance R_{CT} (R_{fat}) being equal (with a strength reserve) to the endurance limit calculated for the load cycles number N for the whole life time of the structure. It is recommended to determine the analytical dependence of R_{fat} on the fundamental parameters affecting the endurance limit (mainly in tension) by two combined equations:

Card 1/4

25236

Steel structures endurance calculation

S/122/60/000/002/003/018
A161/A130

$$\sigma_{[N \neq 2 \cdot 10^6]}^m \cdot N = \sigma_{[N = 2 \cdot 10^6]}^m \cdot 2 \cdot 10^6; \quad (1)$$

$$\sigma_{[N = 2 \cdot 10^6]} = \frac{1}{\left(\frac{\beta}{2\sigma_{-1}} + \frac{1}{2\sigma_b}\right) - \left(\frac{\beta}{2\sigma_{-1}} - \frac{1}{2\sigma_b}\right)\rho} \quad (2)$$

the first of which expresses the Veler curve, and the second the basic straight branch of the Smith diagram. This second equation has been derived assuming that the straight Smith diagram branch passes points with stress values equal to the endurance limit σ_{-1} ($\rho = -1$ and $N = 2$ million) and the ultimate tensile stress limit σ_b . This condition is right for construction steel with a rolled surface, and the second equation takes into account the effect of the effective stress concentration factor (ρ). As stated in Ref. 3 [Gokhberg, M. M., Metallicheskiye konstruksii kranov (Metal structures of cranes), Mashgiz, 1959] σ_{-1} at $N = 2$ million equals one third of σ_b in steel with a rolled surface, and equations (1) and (2) give

$$\sigma_{[N \neq 2 \cdot 10^6]} = \frac{2\sigma_b \sqrt{\frac{2 \cdot 10^6}{N}}}{(3\beta+1) - (3\beta-1)\rho} \text{ kg/mm}^2, \quad (3)$$

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Steel structures endurance calculation

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or the rated fatigue resistance. The factor $\sqrt[m]{\frac{2 \cdot 10^6}{N}}$ can be presented in a short numerical table (Table 2) if all structural steel grades are divided into two classes by the fatigue resistance, and the joints into several types with a certain β factor. The fatigue resistance can then be determined simply and quickly. The stresses from work loads must also be calculated, and the real service of the crane way beams in various shops in metallurgical works had been studied (Ref. 2: A. A. Bat', O raschete na vynoslivost', "Stroitel'naya mekhanika i raschet sooruzheniy", no. 5, 1959), and it was stated that the stress varied in a wide range of 19 to 365 thousand times a year, and the stress values from 210 to 810 kg/cm². A draft "Instruction for designing steel structures of industrial buildings and constructions taking fatigue into consideration" had been set up after the observations. The Instruction includes rules that can eliminate the calculation of the endurance limit of crane way beams. The Instruction draft has been developed by two organizations: the "Proyektstal'konstruktsiya" Institute and the Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy (Central Scientific Research Institute for Structural Parts). The aspects discussed in this article apply in a part for cranes, bridges and RR cars structures. There are 3 tables and 5 Soviet-bloc references.

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